ABSTRACT OF THE DISCLOSURE

A method of manufacturing a capacitor having increased capacitance using a single photo-lithographic step to form two holes of different sizes in the insulating layers, wherein a first insulating layer, an etching stop layer, and a second insulating layer are sequentially deposited on a semiconductor substrate, a preliminary hole is formed by etching a predetermined portion of the second insulating layer, the preliminary hole is expanded so as to form a first hole, a second hole is formed extending from the bottom of the first hole and having an etched area narrower than an etched area of the first hole, a first conductive layer pattern is formed on the sidewalls of the first and second holes and at the bottom surface of the second hole without burying the second hole, thereby increasing the storage capacitance of the capacitor while simplifying the manufacturing process.